1970 President Richard Nixon signs the National Environmental Policy Act, requiring a comprehensive environmental Earth Day. The Clean Air Act is amended, creating stringent anti-pollution laws, setting auto emission standards, and

CLEAN AIR

The Breath of Life — For a Healthy America

Before there was an Environmental Protection Agency, before there was an Earth Day, before Rachel Carson wrote "Silent Spring," there was an air pollution tragedy in Donora, Pennsylvania.

On the evening of October 26, 1948, a suffocating cloud of industrial gases and dust from a local zinc smelter descended upon this town, killing 20 residents and sending 7,000 people — half the population — to the hospital with difficulty breathing.

The Donora tragedy shocked the nation and marked a turning point in our complacency about industrial pollution. Americans demanded breathable air, and industry was forced to clean up. In 1963, Congress passed the first Clean Air Act and then strengthened it in 1970. States were required to meet clean air standards.

Since 1970, we have removed 98 percent of lead from the air, 75 percent of soot, 35 percent of sulfur dioxide, 32 percent of carbon monoxide, and 38 percent of volatile organics which contribute to forming the smog soup now called ozone. At the same time, however, nitrogen oxide (another ingredient that can form smog) rose 11 percent. Overall, between 1970 and 1997, air pollution has dropped by 10 million tons.

We now understand how air pollution blows across state and international boundaries. We understand how haze that obstructs the vistas in Big Bend National Park, Texas is a concern for Mexico and the United States. Last year, we saw how smoke from fires in Mexico can travel into Texas, Louisiana, and Oklahoma.

Economic, Health and Environmental Benefits

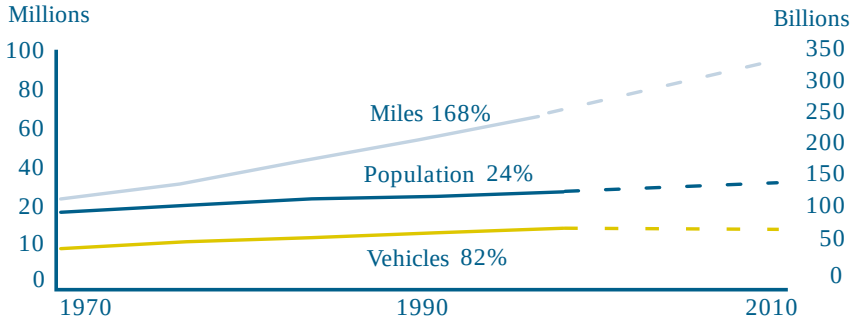
During the past 30 years, air quality has improved significantly because of environmental compliance, industry controls, cleaner gasoline, and more efficient cars despite a 127-percent increase in the number of motor vehicle miles driven and a 31-percent population increase.

Ground-level ozone — today's smog — is still with us, and so are its associated health problems. Studies estimate that 10-20 percent of all respiratory-related hospital visits can be attributed to ozone pollution. Cases of death among children from asthma have reached alarming levels.

The economic value of the public health and environmental benefits that Americans enjoy from the 1990 amendments to the Clean Air Act exceed their costs by a four-to-one margin. An estimated $110 billion will be saved avoiding illness and premature deaths that would have occurred without the new air standards. Houston alone estimates that achieving cleaner air will save the city $3 billion annually.

review for every large project approved or funded by the federal government. Twenty million people celebrate the first requiring state plans to achieve standards. The U.S. Environmental Protection Agency is created with 5,000 employees

Number of Vehicles and Vehicle Miles Traveled Increases Dramatically



Source: EPA OAQPS; U.S. Census

During the past 30 years, air quality has improved significantly while the GDP grew by 140 percent, the population grew by 24 percent, and the number of motor vehicle miles driven increased by 168 percent.

An EPA study shows that by 2010, the 1990 amendments will save 23,000 people from dying prematurely, and will avert more than 1.7 million asthma attacks.

In addition, the Clean Air Act amendments will prevent 67,000 incidents of chronic and acute bronchitis, 91,000 occurrences of shortness of breath, 4.1 million lost work days, and 31 million days that Americans would have had to restrict activity due to air pollution and related illnesses. Also, averted would be 22,000 respiratory-related and 42,000 cardiovascular-related hospital admissions, and 4,800 emergency room visits for asthma.

In December 1999, EPA announced the strongest standards ever for controlling harmful tailpipe emissions from vehicles. For the first time, sport utility vehicles, minivans and pickup trucks will meet the same new low tailpipe emission standards required for passenger cars.

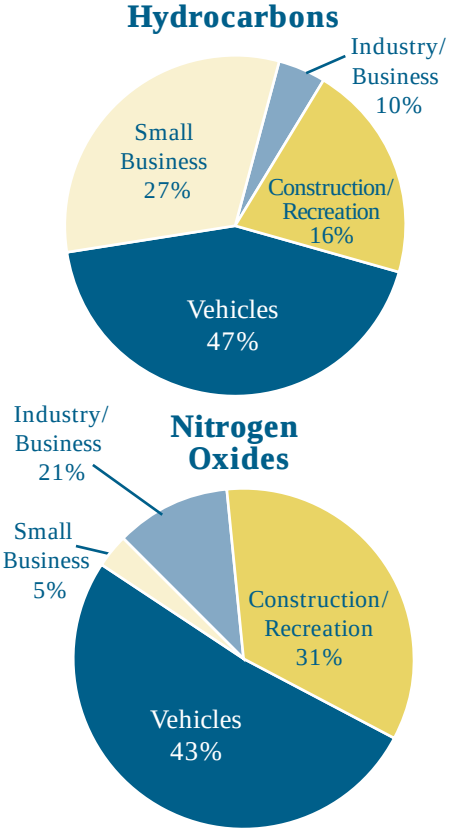
New standards mean that over the next few decades, almost 50 million tons of smog-causing air pollution will be removed from the air, which could result in 260,000 fewer asthma attacks in children, 4,300 premature deaths prevented, and 173,000 respiratory-related illnesses avoided. The standards will save $425 billion in health-related costs and prevent 683,000 lost workdays and more than 5 million days when people would have restricted their activity because of bad air.

Smog in the Central-South

In Texas — the nation's second-fastest-growing state — more than 9.6 million people live in areas that do not meet health-based air quality standards for ozone. Central-South communities in the top 10 fastest-growing metropolitan areas from 1990-1998 are Laredo, McAllen, and Austin, Texas, and Fayetteville, Arkansas — all exceeding a growth rate of 29 percent — more people, more cars, more ozone smog.

Louisiana, New Mexico, and Texas have started auto inspection and maintenance

Dallas/Fort Worth Sources of Air Emissions (Tons Per Day)



and a $1.3 billion budget. 1971 Congress restricts lead-based paints in residences and bans lead paint on cribs and to supply toxicological information and register pesticides. Canada and the U.S. agree to clean up the Great Lakes.

Working together — Mexico, the state of Texas, and the EPA Central-South region are studying air pollution along the international border. Pictured above is Big Bend National Park with and without air pollution haze.

programs to identify high-polluting vehicles. Many cities (Austin, Oklahoma City, San Antonio, and Tulsa) are close to exceeding air quality standards mainly because of growing vehicle traffic. The Dallas-Fort Worth area has significant air quality problems due to vehicle traffic.

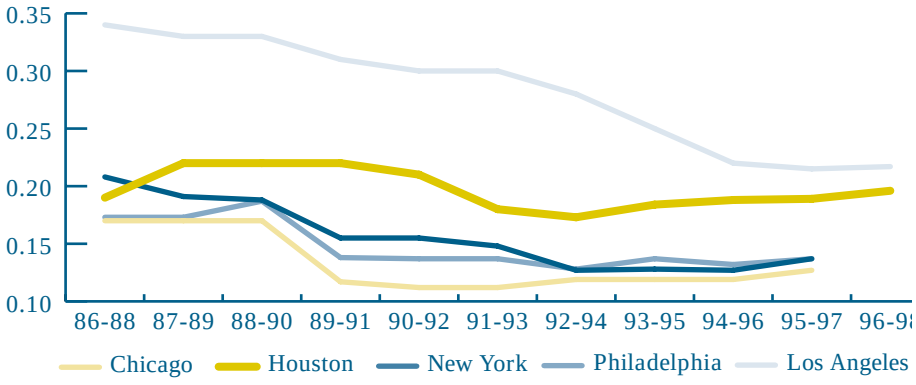
EPA's Central-South region has shown leadership in building alliances with local, state and Tribal governments by helping communities understand the impacts of air pollution. More air monitors are being added to identify air pollution sources, and real-time mapping of air quality data is available on the Internet and on local weather broadcasts for communities like El Paso, Dallas-Fort Worth, and Houston.

We are working with the U.S. Department of Transportation and states to identify opportunities for light-rail systems, transportation corridors, alternative fuel buses and high-occupancy vehicle lanes. In 1999, EPA hosted transportation summits challenging community planners to consider the relationship between transportation projects and air quality.

The region is helping cities like Austin, San Antonio, Corpus Christi, and Tulsa develop a proactive approach to address air quality so that they can meet air quality standards.

Whether the Clean Air Act would have saved 20 lives in Donora in 1948, or will improve life for 100 million Americans living in non-attainment areas, it is clear that protecting air quality is imperative. Protecting the environment has paid big dividends to America, and none bigger than in public health.

1 hour Ozone Trends for Houston and Severe and Extreme Nonattainment Areas



toys. 1972 Clean Water Act is passed, reducing pollution from point sources. DDT is banned. Manufacturers required Representatives of 114 countries meet in Stockholm, Sweden, in first global environmental conference. 1973 Congress